

**Theories of Emotion:  
Integrating philosophy and the social sciences**

By

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**- Abstract -**  
**Theories of Emotion:**  
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The study of emotion is being taken on by many different fields of research. In particular, the social sciences are providing many new areas of development within the field. Philosophy is specially equipped to add to the research on human affective experience by synthesizing the many different fields' work on emotion and providing a critical assessment of the current research. Two primary approaches to understanding emotion are (1) viewing emotion as a product of evolution and (2) viewing emotion as a product of social and cultural interaction. I argue, however, that while each of these approaches accurately explains a particular aspect of affective experience, they should work towards a more compatibilistic theory of emotion which views affective experience as a system that includes both evolutionary and socio-cultural influences. The concept of a looping effect is particularly helpful in illustrating the systemic nature of emotion, and I put forward the concept of a looping effect as a way to assess a theory's ability to incorporate the two distinct aspects of affective experience (i.e., evolutionary psychology and social constructionism and their debate over the role cognitive and non-cognitive processes play in affective experience) which traditionally have been opposed to each other in the effort to present a clear theory of emotion.

## **1. Introduction**

The philosophical effort to understand human emotion begins through introspective investigation as awareness of emotion's impact on experience grows. As part of the human condition, an agent's first hand experience is confined by the boundaries of their person (i.e., the agent's physical and mental isolation entails certain epistemic boundaries which the agent cannot escape).<sup>1</sup> Each agent has the unique experience of perceiving his or her emotional responses, but sympathetic and empathetic experiences provide a window into other agents' affective experience.<sup>2</sup> However, there is disagreement within the social sciences regarding how best to explain the existence of affective experiences like sympathy and empathy, and how to conceptualize the range of emotional experiences had by humans.

On the one hand, evolutionary psychology understands emotions as being derived from a universal set of evolved hardware that is common to all humans. In this way, emotion is construed as an attribute of human experience that can involve non-cognitive and/or cognitive processes that are developed over millennia through the process of evolution. On the other hand, social constructionist theories of emotion focus on the unique social dimensions of affective experience and hold that a full understanding of humans' affective experiences requires an account of the social influences which establish and influence the development and experience of an agent's emotions. These culturally-conditioned features are conceived as being localized to an agent's culture and thus social constructionist accounts of emotion can be contrasted with evolutionary psychologists' universal

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<sup>1</sup> Andy Clark and others, suggest a unique conception of externalism which challenges the traditional ideas of epistemic boundaries that I have just mentioned. By Clark's "extended minds" account, our minds engage in active externalism; active externalism is a phenomenon in which our minds actually extend into the environments around us in order to actively manipulate and participate in producing our perceptions of the external world (Clark and Chalmers 1998). For example, when a person mentally imagines manipulating a large couch through a doorway, that person is actually extending their mind into the external world and, thus, "epistemic action demands epistemic credit" (Clark and Chalmers 1998). Cognitive processes are not restricted to going on within a person's head.

<sup>2</sup> Emotional sympathy is defined as an agent's ability to *understand* another agent's affective experience. Emotional empathy, in contrast, is an agent's ability to personally *feel* another agent's affective experience. See the word listings in the "Works Cited" section for more information.

conception of human emotion because social constructionism finds affective experience to be structured by the unique affective ecology<sup>3</sup> of one's culture.

An examination of the existence of the human ability to sympathize and empathize highlights the differences between social constructionists' and evolutionary psychologists' approaches to explaining these affective phenomena; where the evolutionary psychologists' framework views the capacity for sympathetic and empathetic experiences as something that has been naturally selected for due to its beneficial role in survival and reproduction, the social constructionist framework rejects this sort of approach as reductionist and gives primacy to social forces in its attempt at explaining the existence of these affective processes. While the social constructionist's approach can appreciate on some levels the influences of evolutionary forces such as natural selection, its distinguishing characteristic is its emphasis on understanding emotions through particular social and cultural forces, and not merely evolutionary ones. In spite of the differences between accounts based on evolutionary psychology and those based on social constructionism, I maintain that the tension between the various theories of emotion finds a resolution in compatibilist theories.

In this Thesis, I provide an investigation of three of the main camps of the debate pertaining to the understanding of affective experience: (1) The non-cognitivist theories that consider affective processes to be essentially lower-order processes, (2) The social constructionist theories that put forward philosophical theorizing and detailed anthropological studies to show that emotion cannot fully be understood as a basic non-cognitive function because of the impact cultural forces have on affective experience, and (3) The compatibilist theories which combine characteristics of both of the previous frameworks and hold that affective experience is constituted by a complex interaction between both lower *and* higher-order processes. To illustrate the explanatory power of compatibilism, I develop an example inspired by philosopher of science Ian Hacking's "looping

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<sup>3</sup> The term "ecology" is used here in reference to the intricate interactions among the natural and social worlds which synthesize into an experience which distinctly influences that agent's affective development and experience.

effect of human kinds”. I argue that compatibilist theories are best equipped to explain emotion through the concept of looping effects and that for a theory of emotion to be robust it must be able to account for the empirically informed conception of the looping effect of human affective experience.

## **2. The Problem and Layout:**

This Thesis investigates the contrasting frameworks of three social-scientific disciplines in order to both detail the tension among the explanatory stories that each perspective puts forward, and to help to lay the groundwork for a solution to the explanatory problem that synthesizes features of each perspective. Important questions for philosophy remain, however: (1) Does one these social science frameworks offer a more effective and complete theory of emotion from which to establish a philosophical investigation into emotion? (2) Or do each of the two contrasting frameworks provide a unique, yet partial, perspective that philosophy could beneficially combine into a compatibilist theory of emotion? And even if preserving some sort of hybrid theory is plausible, (3) Why would such a theory be preferable to handling two independent social-science frameworks of emotion?

The relationship between consciousness and its role in both cognitive and non-cognitive theories is a highly debated topic. The debate has not yet been settled among the social scientists and philosophers involved in developing theories of emotion. I do not propose a solution to this debate but, for the purpose of clarity, I will characterize the relationship between social constructionism and evolutionary psychology and the role that each allows consciousness to play in their theories. It is critical to highlight the distinction between the two theories’ treatment of consciousness, for this distinction helps to make clear why the differences between these two theories are differences that are theoretically significant.

While cognitive processes are often associated with conscious processes that involve active mental cognition, not all cognitive processes involve an agent deliberately taking active part in the

mental process. That is to say that for a process to be considered cognitive it need not be a conscious one and vice versa; the terms cognitive and conscious are not synonymous. In many cases, a process is considered conscious if it has been associated with a conscious process at some previous time. For example, the process of learning to read is a highly conscious activity that involves developing a comprehension of the way letters, words, and sentences all fit together in order to communicate ideas to the reader. However, as an agent comes to be fully literate, the process of associating certain letters, words, and sentences with specific ideas becomes non-conscious in many cases. This is the case, for instance, when an agent perceives the letters p-i-z-z-a on a thin rectangular box and unconsciously and immediately makes multiple associations between the letters they have perceived, the shape of the box, and the meanings conveyed by the letters on the object before them. At one time, the process just described could have been a cognitively demanding activity of attempting to associate the letters on the box with a specific word meaning or idea. However, while this process may have once required a conscious effort on the part of the agent, the conscious aspects of this process are no longer required to fully appreciate the basic meanings of the letters/word on the box.<sup>4</sup>

Both cognitivist and non-cognitivist theories allow for non-conscious emotional processes. Cognitivist theories, like social constructionism, allow for social forces to influence affective experience through habituated, non-conscious processes. In contrast, non-cognitivist theories, like evolutionary psychology, allow for evolutionary forces to influence affective experience through the natural selection of particular traits which improve a species' survival and reproductive abilities. However, the way in which each theory understands how the level of consciousness is reduced over time in an agent's affective processes, such as in the development of literacy discussed above, is related to the distinction between the differing roles consciousness plays in affective experience from the cognitivist and non-cognitivist theories of emotion.

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<sup>4</sup> Thank you to Amy Coplan for providing the inspiration for this example.

I categorize social constructionist theories into the cognitivist camp of theories of emotion because they assign a much greater, more direct, and more active role to consciousness in affective experience than non-cognitivist theories such as those put forward by evolutionary psychology. In Jean-Baptiste Lamarck's famous theory of acquired traits, for example, Lamarck theorizes that characteristics acquired by an animal over time can be passed down to that animal's offspring. Lamarck posits that the giraffe's elongated neck, for example, is an adaptation developed over the many years in which generation after generation of giraffes were forced to stretch out their necks in order to reach food sources at the tops of the trees around them (Weinert, 2009: 104). The necks of giraffes are elongated over each animal's life time and then that trait for an elongated neck is passed on to the giraffe's posterity. The Lamarckian theory of the acquisition of characteristics was refuted long ago, but the example stands as one of science's early attempts to connect an animal's traits with the behaviors essential to its survival strategies. This relates to the contemporary evolutionary psychologists' move to explain the development of particular affective experiences as being selected for by natural processes. That is, the evolutionary development of affective experience, along with all of the other genetic characteristics of a species, are passed down to offspring when the genes that allow for a particular affective experience (e.g., disgust) are associated with particular scenarios, like encountering the abject scene of a mutilated carcass, because the genes improve the members of that species' survival. Larmarkianism and contemporary evolutionary psychology are two examples of frameworks which emphasize the role non-cognitive processes play in the development of traits in a species whether those traits are physical or emotional.

Social constructionism, by my account, is classified as a cognitive account. This is because it views the process through which affective experiences are developed within *Homo sapiens* as more cognitive than that of the non-cognitive evolutionary process theorized by evolutionary psychology explained above. The process of acquiring specific affective traits, by the social constructionist's account, involves the transmission of a given emotion from one generation to the next through a



process of social influences and habituation. As was discussed with the literacy example above, affective processes need not be cognitive ones. However, the process of acquiring a trait via social influences and habituation typically requires that an agent's cognitive faculties play a more integral role in the habituation of an affective experience. For example, habituation of disgust towards an abject scene, from a social constructionist's perspective, is engendered via social upbringing and cultural experiences that teach members of a social group to associate negative feelings, like fear, towards scenes that that group considers abject. These socially engendered tendencies to experience certain emotions in response to a particular scenario may indeed share a commonality with evolutionary theory in that an agent's reproductive fitness can be influenced by their standing within a social group<sup>5</sup>. The distinguishing aspect of the social constructionist's theory, though, is the story it tells of the origin for the development and transmission of affective experience which is based in the cognitive human faculties associated with humans' social interactions.

In this work, I contend that a compatibilist theory of emotion is indeed superior and that it provides the best foundation from which to establish a philosophy of emotion. This is because a hybrid theory of emotion combines the best features of each contrasting theory's conceptualizations of emotion and also overcomes the disadvantages that are evident in each framework taken on its own. To defend this thesis, I begin with a discussion of some of the most recent theories of emotion put forward by philosophers embracing non-cognitive theories (**section 3**). I focus in particular on the work of Jesse Prinz, as he develops his theory of emotion as a bodily response on the basis of a vast array of historical and contemporary social science research and cognitive neuroscience (**section 3.1.1**).<sup>6</sup> After presenting Prinz's non-cognitive theory of emotion, I offer a discussion of the methodology taken up by this school of thought (**section 3.1.2**). More specifically, I present a descriptive account of what non-cognitive theorists accept as data and how their framework utilizes

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<sup>5</sup> This notion is central to this Thesis and will be discussed in greater detail in section 5.

<sup>6</sup> Prinz's account of emotion is influenced by the theory of emotion famously developed by William James.

that data in constructing and reinforcing their theory. In the next subsection, I present Catherine Lutz's social constructionist theory of emotion (**section 3.2.1**). Built upon her study of the affective culture of the Ifaluk people of the Ifaluk atoll found in the Caroline Islands of the North Pacific, Lutz's theory challenges evolutionary psychology's framework. Immediately following the presentation of the social constructionist's theories of emotion, I discuss the methodologies of this framework (**section 3.2.2**). Finally, I present a compatibilist theory of emotion through a discussion of the works of Jenefer Robinson and Martha Nussbaum (**section 3.3**). Robinson's and Nussbaum's respective work on emotion present theories that make room for aspects of both the cognitive *and* non-cognitive facets of affective experience. As is the case in section 3.1.2 and 3.2.2, I discuss the methodological commitments of more compatibilist theories like Robinson's and Nussbaum's (**section 3.3.3**).

After surveying the various theories of emotion under consideration in this work, I discuss the advantages and disadvantages of each theory (**section 4**) by referencing the characterizations of each theory's methodological approaches as presented in the previous sections. Next, I argue that the methodological characteristics of the reductionist<sup>7</sup> theories of emotion (i.e., social constructionism and evolutionary psychology) each correctly portray *part* of the story of emotion. However, neither provides a complete picture of emotion based upon the current body of research on emotion from the social sciences.

While Robinson and Nussbaum suggest theories that are more compatibilist than the ones proffered by the reductionists, I argue that the move towards compatibilism should be taken one step further. Thus, I introduce Ian Hacking's theorization of "looping effects of human kinds" (1995: 21), a theory that holds that people's cultural beliefs about themselves influence both their physical and mental development. I offer a conceptualization of the looping effect theory which holds that

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<sup>7</sup> Throughout this paper the term "reductionist" is used to refer to theories which reduce the base of affective experience to a single source (e.g., a bodily response). The term is not used in a way common in the philosophy of science and the philosophy of mind wherein the term commonly refers to a type of materialism.

evolutionary and social forces influence each other and in turn create a feedback loop which influences, among other things, the affective experiences of the people of a given society. I offer support for my theory by drawing on various social scientific investigations which illustrate the reality of the looping effect's influence on affective experience (**section 5**).

Lastly, having argued for the superiority of a compatibilist theory of emotion in the preceding sections, I conclude with a brief summary and discussion of the major facets of my project (**section 6**).

### **3. Theories of Emotion**

#### **3.1 Non-cognitivism – Jesse Prinz**

##### **3.1.1 Prinz – *Gut Reactions***

Prinz's theory of emotion is Neo-Jamesian in that Prinz endorses the idea that our bodies instinctively react to stimuli. Emotions are one way in which our bodies do this, via an agent's autonomic responses to changes in his or her physiological states. Although he emphasizes instinctive affective responses, Prinz also acknowledges that there is a class of complex emotions which involve cognitive processes. In *Gut Reactions* he argues that while emotions essentially are a type of perception that increases our reproductive fitness and have been evolutionarily developed due to their positive influence on the survival of ancient ancestors and, "most emotions experienced in adult human life bear the influence of culture" (2004: 158). However, the recognition that culture plays a role in affective experience does not move Prinz's theory into compatibilism (section 3.4); rather, Prinz's theory utilizes the concept of valence<sup>8</sup> as the mode of cognitive and social influence over emotion.

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<sup>8</sup> Valence, in regards to theories of emotion, is the idea that negative and/or positive inklings can be attached to any given affective experience (Prinz 2004: 167). Prinz also notes that the terms 'negative' and 'positive' are rather uninformative, and adds the qualification that his use of the terms refers to negatively reinforcing and positively reinforcing affective experiences (2004: 175).

Referencing William James's theory of emotion, Prinz explains that unique to the non-cognitive account of emotion is the notion that emotions can be understood as embodied appraisals which are directly excited by certain stimuli. The stimuli that initially arouse a given emotion are thought to lead directly and immediately to the associated physiological state. Thus, while it is allowed that cognitive appraisals can have a secondary influence on affective experience, the *primary* affective response is a bodily one. The higher order influence on affective experience is explained by Prinz's valence theory. Through valence theory, Prinz holds that gut reactions regularly occur, but says that without valence they would have no particular negative or positive influence on our affective experience:

Fear, for example, represents danger, but it does not represent the fact that danger is something that is undesirable. One can imagine being indifferent to danger... That is where valence markers come in. When one couples an embodied fear appraisal with a state that serves as a negative reinforcer, one represents the fact that the situation inducing fear matters (2004: 178).

From this Prinz's theory may seem, *prima facie*, compatibilist, in that it allows for both lower order and higher order aspects to be involved in affective experience. However, Prinz's valence theory is part of a very early phase within the process of affective experience. While the valence of a particular perception may in some ways be determined by cultural influences, the influence of valence on affective experience does not occur through the higher order processing theorized by Robinson and Nussbaum (section 3.4). True Compatibilism, as I understand it, entails a conceptualization of the role one's cognitive faculties play in affective experience. It is not enough to say that one's bodily states can be tinged with certain positive or negative inklings. That is to say that Prinz acknowledges the influence of evolutionary and social forces on an agent's affective experience, however because these forces do not necessarily incorporate any conscious assessment of experience, Prinz's theory does not fall into the compatibilist category as I have defined it. Prinz's theory relies upon the fact that an affective response can be "learned" through social conditioning and does not entail that the affective response is cognitively mediated. Once an association is established and internalized by a

given agent the affective response can occur automatically and without any cognitive evaluation. For this reason, again, I defined Prinz's theory as essentially non-cognitive.

### **3.1.2 Discussion of the Methodological Characteristics of Evolutionary Psychology**

The example of startle and reflex responses are commonly used to illustrate the ways in which emotions can be characterized as bodily responses. Indeed, the title of Prinz's book, *Gut Reactions*, alludes to the notion that his theory provides an account of emotion that bases the foundations of an agent's initial affective experience within the processes hardwired into her bodily perceptions. Imagine an agent walking quietly down a grassy path through a heavily wooded area on a lazy afternoon in May. As the agent rounds a bend in the path, she is startled by a dark, thin, S-shaped figure on the ground near her foot. The initial startle reaction of the agent is said to be non-cognitive because the perception of the figure initially bypasses the agent's cognitive processes in order to first ensure her safety *and then* allows her to cognitively assess the situation further. Regardless of whether or not the S-shaped figure turns out to be a snake or a twig, the agent's startle-based fear reaction is excited without the need for a cognitive assessment to determine the reality of the situation. Thus, from the non-cognitivist's perspective, any initial twinge of fear the agent experiences as part of the initial startle response (prior to her cognitive capacities assessing the situation) is held to be a primary way in which emotion can be defined as a bodily, non-cognitive response because the agent's body initializes the affective state prior to cognitive assessment. A similar instance of the body's ability to cause emotional and physical reactions prior to an agent's cognitive processes taking place among the agent's various processes is when an agent is unexpectedly burned.

The thought of accidentally being burned by unintentionally touching an incredibly hot pan arouses a sense of discomfort and sympathetic pain in many people. The emotions associated with merely imagining such an event are clearly cognitive in that they do not initially incorporate any bodily processes; anyone who has experienced a placebo effect can tell you, just because an

imaginary scene is wrapped up in cognitive processes, does not entail that the body cannot play a subsequent role in the agent's actual physical experience. However, the action of being unexpectedly burned by a hot pan involves a bodily response that comes prior to *any* cognitive processes. This is so because reflex actions, like the one involved in an agent's jerking her hand away from a hot pan, occur through a bodily process that is entirely separate from the mind's cognitive ones. That is, the spinal column contains neural circuits which *immediately* process emergency signals and initiate autonomic, reflexive responses before sending the message on to the brain for further cognitive assessment. According to evolutionary theory, it is likely that this type of autonomic information filtering in creatures capable of both reflexive and cognitive reactions survives due to the autonomic trait's ability to ensure those creatures' survival by removing them from any initial danger and saving them precious time before the cognitive processes are able to take up the task of further filtering the information. Although an autonomic system of this sort could potentially yield false positives in the face of a perceived danger, the body seems to be operating with a "better safe than sorry" system.

Examples such as these aid in clarifying the non-cognitivist theories of emotion proffered by evolutionary psychologists because they provide instances in which it is clear that certain bodily responses are capable of influencing an agent's affective state prior to the agent's cognitive processes influencing her affective state as well. In the case of reflexive startle reactions to the snake-like S-shaped figure, the agent's initial affective state of fear is seemingly initialized by non-cognitive facets of the agent's affective processes. Similarly, an agent's initial reflex to quickly remove her hand from an intensely hot heat source has been shown to be entirely governed by the neural emergency information processing circuits of the spinal column. Evolutionary psychology's approach to explaining the existence of emotion is intimately wrapped up in the basic story that it tells for the existence of any creature's processes: that any process which increases both a living thing's chances of survival and its ability to reproduce effectively is likely to be selected for by natural selection and thus propagated among subsequent generations via the transmission of genes

from generation to generation. Thus, the explanation of the existence of reflexive systems of reaction (as with being burned) and emotion (as with perceiving a possibly dangerous figure) essentially is based in an agent's being born with a genetic code that has been honed by natural selection to allow such reactions and reflexive, affective experiences to occur.

Restricting a theory's explanatory power to discovering the ways in which a trait may have been passed down through generations of life via gene transmission eliminates this theoretical framework's ability to fully appreciate the unique nature and influence of social interaction. Where an agent may be genetically predisposed to associate fear with the perception of snake-like figures, the work of Michael Cook and Susan Mineka (1990) suggests that the fear of snakes is not innate; rather it is a socially conditioned response. An agent's fear response to snakes and snake-like figures is developed through an agent's observation of others' aggravated reactions to snake-like figures (Cook & Mineka 1990: 386). Additionally, in favor of the evolutionary psychologist's camp, Cook and Mineka's results suggest that the salience of an object influences the rate at which an agent can be conditioned with a particular affective response to that object (1990: 386).

Cook's and Mineka's research has shown that it requires a less rigorous process of conditioning to establish a fear response in Rhesus monkeys toward any snake-like figure than to establish a fear response in the test subjects toward a flower-like figure (1990: 386). These results are both helpful and burdensome to evolutionary psychology's method of inquiry and explanation because Cook's and Mineka's research has revealed that while no particular associations between fear and snake-like figures exist innately, agents are predisposed to make associations between these snake-like figures and their own fear-based emotions. This facet of the research supports the evolutionary psychologists' efforts in that it provides them with evidence of natural selection's influence on shaping our dispositions for certain affective experiences in association with particular events and perceptions. Nevertheless, Cook's and Mineka's work burdens the theories of emotion from the evolutionary psychologists' camp by also revealing the role that social interactions play in

shaping and influencing agents' affective experiences. The subjects of Cook's and Mineka's study may have had a genetically driven predisposition which supported the development of an aversion toward snake-like figures but this aversion is not realized without the social influences of a subject observing the association of a discriminatory aversion toward snake-like figures in others.

Evolutionary psychology's theories of emotion are established, through a methodology which investigates the role selective forces play in establishing the affective experiences we know in ourselves and observe in the world around us. So, while evolutionary psychology is not exempt from incorporating some appreciation of the role social forces play in shaping affective experience, its explanatory ability to incorporate these social forces into its theories is hindered because of its methodological focus on the non-cognitive aspects of human affective experience.<sup>9</sup>

Prinz considers theories of emotion from evolutionary psychology to be reductionist in that they reduce their explanation of affective experience to its most basic part. Referencing the work of Darwin and Paul Ekman, among others, Prinz explains that the biological aspect of affective experience is only half of the story (2004: 113). Evolutionary psychology seeks "to support innateness claims...by developing intuitively plausible stories about the adaptive functions of various states and traits" (2004: 117-118). Exceedingly reductionist, evolutionary psychologists even go so far as to hold that even higher-order cognitive emotions are the product of natural selection. Prinz works to separate his theory from this lot. He explains that although the work of Ekman and others is indebted to evolutionary psychology because it suggests that members of the human species have shared physiological and genetic factors, "this evidence does not show that the emotions we have names for in English exist in all cultures" (2004: 129). In some instances, then, particular emotions can be culturally unique affective experiences which *cannot* be identified as universally shared

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<sup>9</sup> This topic is addressed in further detail in both sections 3.4 and 4.0



affective experiences.<sup>10</sup> In this way, Prinz criticizes the reductionist theory of emotion on the grounds that it relies too heavily on inferences that fall victim to the epistemic uncertainty entailed in a theory based upon the ways in which natural selection has guided our affective experiences over millions of years to those that we experience today. For example, when evolutionary psychologists observe affective experience in the world today, they infer that the continued occurrence of that emotion is based on the role the emotion played in the species' survival. While this theory can provide plausible explanations for why a given affective experience occurs in a species, the nature of this inference renders its explanations *post hoc ergo propter hoc*.

Prinz supports his valence theory with research in the cognitive neurosciences. In particular, Prinz relies upon empirical studies on the neural architecture of emotions to support his claims regarding valence. For instance, Prinz compares several neurological studies which support the claim that emotions seem to have two distinctive parts (2004: 162-163).<sup>11</sup> The brain scans taken in these studies show that a particular affective experience can be associated with separate areas of the brain that are each associated with positive or negative valences, and other areas typically associated with a particular bodily profile. Thus, Prinz argues that this lends support to his valence theory because the various affective responses in these studies each are subserved by processes that take place in separate areas of the brain and each of these areas are known to be associated with valence and bodily feedback (2004: 165).

From this basic overview of Prinz's argument for his valence theory, it can be seen that his version of non-cognitivism relies heavily upon cognitive neuroscience. That is, the crux of Prinz's valence theory is most strongly supported by his reference to empirical studies of the brain's form

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<sup>10</sup> Prinz offers, for example, that "some researchers believe that emotions such as *gezelligheid*, *amae*, *song*, and patriotism are unique to particular cultures" (2004: 131).

<sup>11</sup> Various studies have been unable to agree upon the "exact anatomical substrates of negative and positive valence," Prinz admits (2004: 162). However, regardless of these discrepancies, all of the results suggest that positive and negative valence involve distinct structures. For more on these studies, see Davidson, 1992; Sutton & Davidson, 1997; Northoff et al., 2000.

and function, and the ways in which his theory can be linked to how the average human brain has been found to react to and process emotion. In this way, while not strictly reductionist, Prinz's valence theory seems to be in line with the goal of evolutionary psychology which is to explain affective experience as being founded upon universally shared human traits.

### **3.2 Social Constructionist Theories of Emotion**

#### **3.2.1 Lutz – *Unnatural Emotions***

Social constructionist accounts of emotion aim at explaining various affective phenomena by appealing to a given society's cultural influences and values. Social structure, for the social constructionist, provides the foundation from which a given society's range of emotional responses can be understood and explained. Catherine Lutz, an ethnopsychologist, explains:

To understand the meaning of an emotion word is to be able to envisage (and perhaps to find oneself able to participate in) a complicated scene with actors, actions, interpersonal relationships in a particular state of repair, moral points of view, facial expressions, personal and social goods, and sequences of events (1998: 10).

While Lutz's social constructionist understanding of emotion holds that true understanding of a given emotion from a given culture requires *complete* understanding of the intricate network of social identity that comprises that society, it does not deny that non-conscious processes have the ability to influence the formation and understanding of emotion in a given culture. Given a broad understanding of social construction, perhaps social construction need not defend a culturally-local conception of emotions. Instead, social construction could accommodate certain compatibilist ideas and allow room for an accurate understanding of non-cognitive social processes. This would allow for some universality to be incorporated in the social constructionist's conception of emotion from an evolutionary perspective.

The social constructionist's understanding of emotion is not *necessarily* based solely upon cognitive processes. In point of fact, many of the socially constructed aspects of emotion show some level of compatibility with being conceptualized as non-cognitive processes. The distinction being

made by relating social constructionists with cognitive theories of emotion, however, is aimed at illustrating their principal contrast with evolutionary psychologists. While appraisal theories of emotion like evolutionary psychology can account for the role non-cognitive processes play in emotion, they also emphasize the influence of social interaction, which develops through a given agent's higher-order processes and does not remain founded solely upon that agent's lower, pre-reflective processes.<sup>12</sup>

My initial distinction between social constructionism and evolutionary psychology aims at highlighting a shortcoming of evolutionary psychology's efforts to understand emotion on a strictly pre-reflective level. That is that evolutionary psychology and the strictly non-cognitive approach to understanding emotion do not give sufficient attention to the influence of higher-level processes that *immediately* impact affective experience. As Prinz puts it:

According to defenders of cognitive theories, emotions depend on propositional attitudes. These are construed as structured, concept-laden mental representations that are not identical to the somatic states associated with our emotions (2004: 242).

Lutz's theory of social constructionism is related to the previous statement from Prinz in that it holds that a given agent's primary affective experience is too bound by social forces to be accurately conceptualized on any more foundational levels (e.g., evolutionary or biological levels). In her own words, Lutz concludes that:

The evidence presented [in her work entitled *Unnatural Emotions*] can be used to suggest that emotion experience, both in the West and on Ifaluk, is more aptly viewed as the outcome of social relations and their corollary worldviews than as universal psychobiological entities (1998: 209).

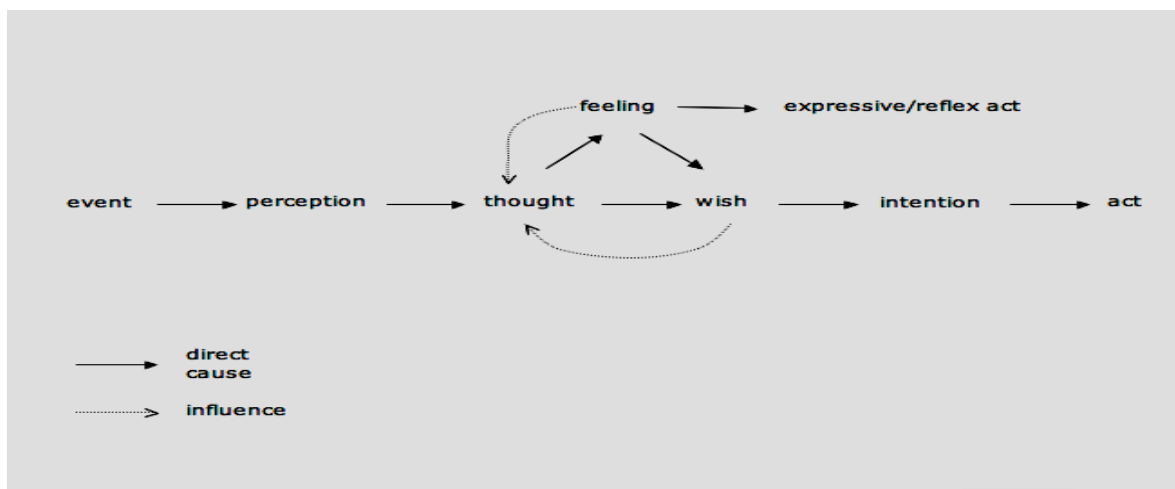
Thus, affective experience is understood by Lutz as a socially constructed, culturally local entity which can truly be understood *only* as something completely integrated into a given society. A theory of emotion, for the social constructionist, provides an account of the cognitive processes which does not consider the essential components of affective experience to be lower-order processes.

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<sup>12</sup> Appraisal theories of emotion are a class of theory which holds that emotion primarily is a bodily appraisal (e.g., see the discussion of William James's theory of emotion on page 11).

### 3.2.2 Discussion of the Methodological Characteristics of Social Constructionism

Lutz's theories are based heavily upon the branch of anthropology known as ethnography, "the scientific description of nations or races of men with their customs, habits, and points of difference" (Ethnography, Oxford English Dictionary). For instance, Lutz references the work of ethnopsychologist Roy D'Andrade, which emphasizes cognitive processing. Consider the diagram below, which is taken from D'Andrade's influential work and shows an agent's initial perceptions being processed only *after* the agent engages in some level of cognitive processing:<sup>13</sup>



In line with social constructionist theories which I discussed in section 3.2.1, D'Andrade emphasizes that perceptions are filtered through cognitive processes prior to generating affective experience. Take the affective experience of fear for example. As an agent walks out of Liberty Hall after a midnight showing of her favorite film, she begins to make her way to her car parked in a lot at the end of a dark alley. Never mind the fact that the agent is already tense with anticipation of an encounter in the seedy alleyway, she is startled by a shifting shadow as she passes by a dumpster half-way to her car. The agent has just experienced an instance labeled in D'Andrade's diagram as the "event". The agent perceives, in immediate conjunction with the event, the shadow shifting and her mind *immediately* processes the perception through her cognitive capacity for what D'Andrade

<sup>13</sup> Image from: <http://www.anth.uconn.edu/faculty/dandrade/>

labels as “thought” (refer to the diagram above). This thought process, as was discussed in detail in section 2, need not be a conscious thought at this stage in the affective chain of events. Rather, the initial thoughts involved in the processing of the agent’s startle event go on to either stimulate a non-cognitive reflex action and reflexive affective experience or a cognitive assessment of the perceived event. The characteristic cognitive aspect of this model of affective processes is that *thought* rather than a reflexive bodily response comes first. Thus, with reference to D’Andrade Lutz provides evidence from the social science of ethnopsychology, that supports her notion that affective experience is a type cognitive process influenced by culture, and cannot be effectively understood as a non-cognitive process alone (1998: 94-95).

The works of animal and human behaviorists (e.g., Paul Ekman) prove to be a battleground between the social constructionists and evolutionary psychologists. Where the tendency to universalize the human experience of emotion is characteristic of the non-cognitive camp, social constructionists critique the generalizing work of Ekman and others. Specifically, Lutz states:

[While] cross-cultural accounts [of emotion] have been presented traditionally as natural rather than cultural events (i.e., as scientific discoveries rather than historical products), they have made use of concepts taken wholesale from the lay emotion language of the West (1998: 217).

Although much of the research and discussion surrounding Ekman’s results is biased according to Lutz, she acknowledges that many Twentieth-century anthropologists have had to work to eliminate their own cultural biases. However, Lutz holds that a Universalist theory of emotion, like that of Ekman, is lacking because it

[O]nly succeeds in pushing the cultural perspective of the anthropologist ‘underground, into the subconscious,’ with the result that anthropologists then simply ‘project their intuitive understanding...onto a presumed universal structural framework of human thought’ (Leacock and Nash 1977: 642) (Lutz 1998: 221).

Lutz acknowledges that if such an accusation is to hold, it must also hold for the social constructionist because one’s ideas, language, culture, etc. confine the ways one can explain the

theories one puts forward. In conclusion, then, Lutz offers that “[r]eflection on what exactly those ideas are...can help to mitigate the effect of their use by removing them from exclusive residence in the realm of the natural...into that of the cultural and historical” (1998: 225). Thus, awareness and discussion of our biases at least is one way to account for the influences of those biases and provide ourselves with the opportunity to counteract them.

The work of evolutionary psychologists, however, is not necessarily doomed to an inevitably biased perspective due to a refusal to pay adequate attention to the role that one’s cultural ideals and beliefs play in the formulation of theories. In fact, those more inclined to evolutionary accounts are required to account for the possibility of biases influencing the development of a theory, just as are all of those who work to develop other robust scientific theories. The methodologies of a given discipline, however, can play an important role in identifying the biases present in a given school of thought. For instance, as Lutz explains in the quote above, social constructionists’ focus on understanding the role that social and cultural forces have on a people predisposes the discipline to consider the ways in which contemporary social and cultural forces could manipulate the researchers’ own theories and beliefs. In contrast, evolutionary psychologists focus is on the role that biological forces of natural selection play in influencing a given people’s affective experience. The nature of this approach has the potential to bias the discipline’s theorizing away from considerations of the theorists’ own cultural biases altogether if they perceive that their own cultural beliefs have nothing to do with the evolutionary processes of pre-history.<sup>14</sup>

In a discussion of the way in which cultural values influence science, Lynn Hankinson Nelson and Alison Wylie discuss an instance in which contemporary cultural beliefs skew the results of a scholarly anthropological study (Kincaid, Dupré, and Wylie 2007: 65). They reference a study in which a researcher, Denise Donlon, critically reinterpreted data that suggested a prevalence of male specimens among a university’s collections (Donlon 1993). In her study, Donlon found that the

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<sup>14</sup> This consideration is discussed in further detail with an example in section 5.

skewed sex ratios reported by a previous study were inaccurate and “most plausibly reflect systematic errors in sex identification due to reliance on measures of ‘robustness’ that presuppose ethnocentric stereotypes of physical dimorphism” (Kincaid, Dupré, and Wylie: 2007: 65). Physical dimorphism refers to a notable physical difference between males and females. Across many cultures male skeletal remains have been found to be, on average, larger than female skeletal remains. This commonality was only one of the assumptions which misled the researchers critiqued by Donlon. However, a deeper prejudice was found to have biased the researchers’ work. The deeper prejudice was from researchers’ assumption that ancient peoples’ skeletons exhibit sexual dimorphisms in a way similar to the sexual dimorphism of people’s skeletal structures observed today (i.e., contemporary human male skeletons are generally larger than contemporary human female ones). Donlon found that many of the skeletons from the collection were erroneously labeled as male, which suggests that the original researchers’ work had been biased by certain of their own cultural beliefs. Additionally, Donlon’s research revealed that the common use of the “male as hunter” archetype should be reevaluated so that future anthropological work is not biased by this preconception of a history of humankind in which the men must be larger in order to effectively provide for their community while women are forced into roles which allow for the development of smaller skeletal frames. Donlon concludes that “it is a mistake to project onto prehistoric Aboriginal foragers the norms of gender-segregated physical activity that are conventional in sedentary, largely urban, middle-class contexts” (1993).

The work of Donlon is further supported by a study from Hetty Jo Brumbach and Robert Jarvenpa (1997). Brumbach and Jarvenpa successfully showed that the role of the women of the subarctic Dene people was primarily a hunting one. This data contradicts much of the Western world’s accepted definitions of male and female gender roles. This contradiction suggests that “archaeologists should reassess standard ascriptions of function to sites and artifacts where these depend on an identification of hunting activities with men, sharply segregated from the domestic

activities associated with women” (Kincaid, Dupré, and Wylie 2007: 67). The work done by feminist anthropologists like Donlon, Brumbach, and Jarvenpa provides evidence of the fact that even though anthropologists may be in a better position than evolutionary psychologists to critically assess their own cultural biases, social scientists are not as exempt from this issue as Lutz suggests.

The research supporting Lutz’s theory of social constructionism is comprised almost entirely of data collected by anthropological studies. Lutz references countless ethnographic investigations, but does not attempt to give any meaningful account of the biologically based scientific studies of emotion which provide an understanding of emotion as a non-cognitive biological process. Rather, she suggests that Habermas’s 1971 establishment of “technical interest”, as a standard for how to determine what counts as knowledge, was the beginning of a movement that instilled a very controlled chain-reaction within the scientific community that resulted in emotions being viewed as vague, imprecise, unpredictable, and generally disassociated from rational investigation (1998: 220).<sup>15</sup> However, Lutz’s thesis is an attempt to counter Habermas’s dismissal of emotions as too “disassociated with rational investigation”. Her project details many ways in which rational anthropological study can reveal the ways socially constructed values and ideas are an essential aspect of human affective experience.

### **3.3 Compatibilist Theories – Jenefer Robinson and Martha Nussbaum**

#### **3.3.1 Robinson – *Deeper than Reason***

Robinson’s theory holds that emotions are *processes*, which begin as non-cognitive appraisals that arouse certain physiological states that in turn produce tendencies in human action, further appraisals, etc. Only secondarily do cognitive appraisals apply their influence to the human affective experience through the process of cognitive monitoring (2005: 3). And yet this emotion process, according to Robinson’s theory, must be taken as an entire unit that includes both the cognitive and non-cognitive

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<sup>15</sup> For a contrasting view to Habermas’s, see Alison Jaggar’s article Love and Knowledge: Emotion in Feminist Epistemology where she holds that emotions cannot and *should not* be removed from scientific investigations.



facets of emotion. In defining emotions as a *process*, Robinson argues that the process of affective experience is two-fold: First, there are non-cognitive perceptions, which are then followed by cognitive appraisals. While Robinson holds that for some emotions cognitive appraisal is only secondary, she is not advancing a non-cognitive theory of emotion. Instead, the process, for Robinson, is essential for understanding emotion. She allows that “gut reactions”<sup>16</sup> seem indeed to be non-cognitive affective events; however, these instances comprise only part of the whole of affective experience. To reduce the understanding of emotion to the foundation of its bodily perception is to omit the vast array of human affective experience that is influenced, and/or dictated by the cognitive facets of the process. Even though Prinz differentiates himself from reductionist theories in *Gut Reactions* (see section 3.1.1), Robinson maintains that Prinz has only really provided a very clever and informed theory of gut reactions and has not provided an explanation of emotions proper (2007). As Robinson states, “it seems as *if some kind of appraisal or evaluation is necessary for emotion and that we distinguish one emotion from another by reference to the different kinds of appraisal they require*” (2005: 26).

Robinson draws a great deal on the research of neuroscientist Joseph LeDoux. In particular, from LeDoux’s research, Robinson concludes that “an affective appraisal draws attention to something in the environment significant to me or mine and gets my body ready for appropriate action” (2005: 59). Thus, Robinson’s theory allows for a consideration of cognitive emotional responses that are excited entirely by cognitive stimuli, such as belief. Robinson summarizes her position with the statement that

There are indeed affective appraisals that initiate the physiological and behavioural changes that we define as emotional. Further, even if it is a cognitively complex thought or belief that *appears* to trigger an emotional response, the response itself is the result of a rough and ready affective appraisal *of* that thought or belief, serving to direct attention to it and to prepare for appropriate action (2005: 70).

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<sup>16</sup> a direct reference, made by Robinson, to Prinz’s work *Gut Reactions*, 2008

Prima facie, Robinson's claim can be read as non-cognitive in that at the core of affective experience, lays a "rough and ready affective appraisal". However, Robinson's work differs from Prinz's more non-cognitive framework because of the increased level to which she allows that cognitive processes play a role in human affective experience. Furthermore, for the purposes of this project, the focus is on the origin of those "rough and ready affective appraisals". In a discussion of LeDoux's research, Robinson qualifies her theory by endorsing LeDoux's theory that there is a link between humankind's 'fundamental life tasks' and the possible universality of certain basic emotions (2005: 69). That is, certain basic emotions are indeed shared by all humans because of the role they have played in allowing members of the human species to successfully survive and reproduce. Granting the possibility that *all* human agents have a shared core of basic emotions on which their affective experiences are based, does not entail that those basic emotions have always been part of non-cognitive, and unconscious evolutionary forces. Instead, a set of basic emotions might have become established over millennia of interplay between social and genetic forces.<sup>17</sup> Thus, the primary role of cognitive processes in affective experience is as a monitoring and reappraisal pathway. Because of her emphasis on understanding the cognitive processes as an essential *part* of the affective experience along with the initial perception of physiological states, I have labeled Robinson's theory a form of compatibilism.

### 3.3.2 Nussbaum – *Hiding from Humanity and Upheavals of Thought*

Evaluative judgments are a point at which social construction relates to cognitive theories of emotion. Martha Nussbaum, for one, makes this connection in her discussion of disgust in *Hiding from Humanity: Disgust, Shame, and the Law*:

In many ways our social relations, too, are structured by the disgusting and our multifarious attempts to ward it off. Ways of dealing with repulsive animal substances such as feces, corpses, and rotten meat are pervasive sources of social custom (2004: 72).

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<sup>17</sup> This notion will be detailed further in section 5.

With this, Nussbaum provides an illustration of Robert Solomon's notion of the way an affective response provides a socially constructed lens through which to view the world.

In *Upheavals of Thought: The Intelligence of Emotions*, Nussbaum suggests that "[t]o call an emotion cognitive does not, of course entail that it is either conscious or reflective" (2001: 115). This presents a conception of affective judgments which does not essentially entail a conscious appraisal of stimuli. Rather, for Nussbaum, affective appraisals can, and do, take place on a sub-conscious level. And so in Nussbaum's appraisal theory of emotion, an account is given which establishes a nuanced conceptualization of conscious *and* physiological responses that understands them as reacting to affective stimuli on multiple levels of processing.

Similar to Robinson's theory above, Nussbaum's theory is partly inspired by the work of neuroscientist Joseph LeDoux. LeDoux explains that,

[the] establishment of memories is a function of the entire network, not just of one component. The amygdala is certainly crucial, but we must not lose sight of the fact that its functions exist only by virtue of the system to which it belongs (1994: 56).

Given LeDoux's conception of a network of functions being involved in the process of memory formation, Nussbaum conceives of affective judgments as part of a complex system that do not essentially entail a conscious appraisal of stimuli. Rather, for Nussbaum, affective appraisals can, and do, take place on a sub-conscious level. And so in Nussbaum's appraisal theory of emotion, an account is given which addresses cognitive and physiological responses to affective stimuli.

Emotions for Nussbaum become a hybrid of the cognitive and physiological:

Once one has formed attachments to unstable things not fully under one's control, once one has made these part of one's notion of one's flourishing, one has emotions of a background kind toward them—on my view, judgments that acknowledge their enormous worth—that persist in the fabric of one's life, and are crucial to the explanation of one's actions (2001: 71).

Thus, one's affective experience is governed by the interaction between cognitive and non-cognitive processes which each play a role in one's ability to integrate cognitive judgments to the extent that those judgments no longer need governance by their formative cognitive faculties and instead come

to “persist in the fabric of one’s life”. Nussbaum’s theory makes room for a definition of emotion which allows for both cognitive and non-cognitive facets on fundamental levels of humans’ affective experience. She, therefore, has been categorized as compatibilist. The concern initially expressed about the confounding lack of distinction between the conscious and unconscious aspects of cognitivism and non-cognitivism finds some resolution in Nussbaum’s theory—as is also the case in Robinson’s theory— however in section 5 a more in-depth way to clarify this distinction is presented.

### **3.3.3 Discussion of the Methodological Characteristics of Compatibilist Theory**

Compatibilist theories of emotion contain features of cognitivism and non-cognitivism which appeal to both social scientific and biological investigations. From the philosophical side of the study of emotion, Robinson references Solomon, Nussbaum, William Lyons, etc., and from the social and cognitive sciences, she references Richard Lazarus, Ekman, Robert Zajonc and Antonio Damasio, among others. Providing a synthesis of the various realms of theorizing on emotion, Robinson’s work is founded upon the very old idea that there is a fundamental connection between emotion and bodily states which is a concept attributed to William James’s theory of emotion. However, Robinson develops her theory with the addition of more contemporary studies which have improved our understanding of the ways in which humans’ cognitive abilities are an integral aspect of our affective experiences.

Robinson finds that the social constructionists and the valence theorists are each using very focused data sets to understand a piece of the whole of affective experience. Robinson argues that there are indeed a small number of basic non-cognitive emotion systems, but that there is also a complex array of cognitive emotions that are initiated by non-cognitive appraisals (2005: 89). As Robinson states, “a cognitive evaluation alone cannot cause, much less *be*, an emotion”, however the orientation of an agent’s emotional experience *is* defined by the seemingly limitless combination of languages and cultures acting on that agent (2005: 90).

In similar form, Nussbaum pulls from both schools of emotion theory. In *Hiding from Humanity*, she emphasizes the anthropological studies that help to explain the variation that occurs among the associated objects of various cultures' feelings of disgust. However, in *Upheavals of Thought*, Nussbaum provides reference to both the Arts and Humanities as well as references from the social scientific literature in order to develop her own position.

<b>4. Discussion of the Arguments: Cognitivism's and Non-Cognitivism's Approach to Emotion Theory</b>
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An example displays the ways each theory's framework offers an informative perspective for analysis and also demonstrates each theory's shortcomings. The aversion to abject and bloody scenes has been studied and contemplated both culturally and biologically for thousands of years. Plato's *Republic* displays a scene in which this aversion is exhibited:

Leontius, the son of Aglaion, was going up from the Piraeus along the outside of the North Wall when he saw some corpses lying at the executioner's feet. He had an appetite to look at them but at the same time he was disgusted and turned away. For a time he struggled with himself and covered his face, but, finally, overpowered by the appetite, he pushed his eyes wide open and rushed towards the corpses, saying, "Look for yourselves, you evil wretches, take your fill of the beautiful sight!" (Bk IV, Ln 435-442).

Plato's notion of the 3-part soul comprised of reason (rationality), spirit (emotion), and appetite (desires) suggests that the 'appetite' that Leontius fell victim to was a process which could not be overcome by the rational and emotional facets of his being. Leontius's actions demonstrate the existence of complex and conflicting processes involved with human experiences related to emotion in that Leontius's reaction to the abject scene exhibits multiple layers of processes influencing each other. The non-cognitive theories of emotion share a similar vein of thought with their notion that bodily responses are the foundation of affective experience and in many cases simply are gut reactions. While the non-cognitive foundations of frameworks such as Prinz's understand emotion as having a secondary cognitive component, the essential nature of human physiological responses in

affective experience make emotion a non-cognitive process. Primacy is given to the idea that emotions are composed of physiological appraisals and responses that make up affective experiences, and so from a non-cognitive perspective, Plato's scene can be understood as demonstrating the foundational role that non-cognitive processes play in the affective experience of human beings. While Leontius was disgusted and urged by certain of his faculties to avert his eyes, there was no amount of conscious effort that could completely squelch his appetite to gaze upon the pile of corpses. The non-cognitive approach, thus, has the benefit of conceptualizing emotional responses on their most basic levels (e.g., the physiological level) and offering a straight-forward, reduced conceptualization of affective experience. However, the diminished role given to cognitive processes deprives non-cognitive theories of the ability to adequately account for the long term effects of social practices that play a formative role in physiological processes.

A second example will help to illustrate the advantages of the cognitive perspective of emotion theory. Medical doctors, through the process of their education, are trained to overcome their aversion to bodily fluids, death, and other aspects of the practice of medicine that are generally found to be repulsive. This sort of training is necessary because a natural aversion to things such as bodily fluids has been documented in psychological studies. Natural aversions such as this play a role in the cross-cultural presence of abject affective experiences such as disgust which can be identified cross-culturally, though the object of disgust can differ. The horror film industry also provides a testament to the existence of the aversion to bodily fluids with its over-used appeal to this brand of horror to arouse disgust in audiences through the graphic depiction of vomit, blood, gore, etc. (Creed 1993: 10).<sup>18</sup> Simon Baron-Cohen suggests that, like the aversion to darkness, an over-responsive aversion to blood is a phylogenically derived predisposition inherited from ancient man (Baron-

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<sup>18</sup> Creed's research into the abject and its role in horror is highly influenced by the work of Julia Kristeva and her essay *The Powers of Abjections*. Also, for more research on disgust and its application in art see *The Philosophy of Horror, or, Paradoxes of The Heart* by Noël Carroll.

Cohen 1997: 27). What once served as a survival strategy to avoid deadly conditions, such as prolonged exposure in areas where predators are active and infectious agents are present, is reinforced as a natural response that doctors are asked to overcome. The social constructionist and cognitive theorist proffer frameworks that appreciate the ways in which social practices play an influential role in affective experience. While emotions, at their most basic level, entail the physiological states through which they are experienced, those physiological states are not solely the product of evolutionary processes; there are socially selective forces at work as well. Recall the discussion of Cook's and Mineka's research in conditioning the fear of Rhesus monkeys. Their research demonstrated that while a phylogenetic trait can predispose the members of a species to develop a fear and aversion to something, social forces are required to tap into that predisposition and create within the subject an association between the object and the affective experience of fear and aversion. The cognitivist's framework is more able to realize the complexities of affective experience in terms of the social forces that influence and tailor our physiological states both immediately (e.g., through the training of medical doctors) and historically (e.g., over thousands of years of socially selective forces). Further, compatibilism provides an even more effective take on the social constructionist's approach because compatibilism incorporates a deep appreciation for the interplay that is present between emotion's cognitive and non-cognitive aspects as part of a multifaceted system.

The process of cognitive filtering further complicates the work on the role consciousness plays in affective experience. This is due to the ability of cognitive faculties to execute processes unconsciously. The division between cognitive and non-cognitive theories of emotion would be rather clear cut if theorists could clearly draw a line of distinction between the role of non-conscious processes in cognitive and non-cognitive theories. Cognitive filtering, for instance, allows the mind to direct perceptions toward completing a task while blocking out the perception of unrelated events. "The Invisible Gorilla" experiment demonstrates the effectiveness of cognitive filtering, though it is

most effective when a viewer has never seen the video and is unaware of the fact that while the video directs the viewer to count the number of passes made by people in white shirts, the true goal of the video is to test whether or not the viewer is aware that a person in a gorilla suit passes through the group of people passing basketballs.<sup>19</sup> The results of this study show that a majority of people who view the video do not notice the person dressed in the gorilla suit passing through the group of people passing the basketball—until they are given a second chance to view the video. The researchers explain that this is due to a process of cognitive filtering through which the cognitive faculties are able to unconsciously filter out seemingly unimportant perceptions (i.e., the person dressed in a gorilla suit passing through the busy scene). Thus, while a highly cognitive process is taking place, the faculties of cognition exhibit the ability to unconsciously manipulate an agent's experience of her perceptions.

Evolutionary psychology's and social constructionism's theories contrast fundamentally regarding the foundation of affective experience. The evolutionary psychologist holds the foundation of affective experience to be humanity's universally shared biology. Social constructionists, in contrast, view the seat of affective experience to be the socially developed attributes that uniquely define each culture's specific ecology of emotion. That is to say that while the average individuals of each society share the same basic biological toolbox from which to build their unique affective experience, human experience takes on its emotional facet proper, only *after* social forces have used an individual's biological toolbox to create her culturally-unique affective experience.

## **5. Affective Feedback Looping – Applying Hacking's Looping Effect**

In a 1995 publication, Ian Hacking introduced the idea of the looping effect of human kinds: "people classified in a certain way tend to conform to or grow into the ways that they are described"

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<sup>19</sup> "The Invisible Gorilla" video experiment was produced by Christopher Chabris and Daniel Simons and is available for viewing here: [http://www.theinvisiblegorilla.com/gorilla\\_experiment.html](http://www.theinvisiblegorilla.com/gorilla_experiment.html)  
Thank you to Ann Cudd for the idea to include a short discussion of this experiment.



(21). This idea is based in part on the observation that human beings are self-conscious, and this capacity brings about instances in which people's ideas about themselves both individually and as a people tend to influence multiple aspects of their lives (Hacking 1999: 59). As was explained in section 3.2.2, an instance of this is the occurrence of sexual dimorphism among human populations. Where one sex, the male sex for example, is culturally assumed to take a more active role in hunting, the beliefs regarding the role of each sex in this society select for stronger and more durable physiological construction in the society's male population. At the same time the evolutionary forces of natural selection act as a reinforcement of the given social structure in which it has been determined that one sex is to be the hunter. This reinforcement occurs when a society's potential to thrive is supported when healthier and more capable hunting genes are selected for within the males of that society. Thus, over many years, the body types of the sexes within a culture diverge, one becoming larger, on average, than the other. Through the looping effect, then, the beliefs of a given group of people influence the selective adaptations for that group, i.e., sexual reproduction within the group is highly influenced by the people's desires for members of the opposite sex who exhibit the culturally accepted body types—types that were naturally selected for due to the survival and reproductive benefits associated with them—in which the men have larger body types and the women have smaller body types. This in turn completes the loop when the increased dimorphism between sexes becomes a social expectation and, once again, continues its influence on the evolutionary selective progress of the population.

Hacking's looping effect of human kinds is a member of a subgroup of a larger class of feedback loops. The looping effect of human kinds and the members of the larger group of feedback loops share a commonality in that looping systems are characterized by a self-perpetuating nature. Further, self-perpetuation within looping effects is carried out by two or more aspects of a given system's systematic processes. For example, looping effects are found around us in many different capacities. Instances of looping range from the relationship between predator and prey populations

which inversely influence each other, to blood clotting which exhibits a positive feedback loop as each newly accumulated platelet releases chemicals which further stimulate the accumulation of even more platelets until a complete clot is formed. These illustrations show that a system exhibits a looping effect when that system reinforces and reiterates a particular process.

Theories of emotion are also capable of explaining the ways in which social and biological processes have a reciprocal relationship within a looping effect of affective processes. For instance, the biological mechanisms of affective experience detailed by Prinz are evidenced by the in-depth studies of the ways in which some affective processes are produced *prior to* a person's associated cognitive processes being stimulated.<sup>20</sup>

In turn, the anthropological studies of Lutz illustrate that a person's affective experience is influenced by the social aspects of human experience to the extent that specific iterations of affective experience in one culture cannot necessarily be transposed on the affective experiences of members of a different culture. This is because, for social constructionism, affective experience is so highly refined by social interaction that the experience of those emotions can *never* be fully appreciated without an emotional upbringing in that culture. The emotional ecology of any given culture is too complex to be fully appreciated by any non-native of that culture. Thus, emotional experience cannot be completely understood as mere bodily processes because in many ways, emotions are foundationally influenced by an agent's cultural beliefs and practices which can include cognitive and/or non-cognitive socially based processes.<sup>21</sup>

The stark division between the non-cognitive and social-constructionist theories of emotion can be bridged using the concept of a feedback loop. Utilizing an understanding of the way in which

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<sup>20</sup> Recall the discussion in section 3.1.2 of the cognitive and non-cognitive processes involved in reflexive affective experiences, e.g., the way in which an agent may experience fear upon perceiving an unexpected snake-like figure.

<sup>21</sup> As was mentioned in section 3.2, social constructionism need not be strictly cognitive, because many of the processes which govern social interaction are not self-aware. Thus, social constructionism can be viewed as incorporating components from both cognitive *and* non-cognitive frameworks.

affective feedback loops influence affective experience allows for a synthesis of the cognitive and non-cognitive theories to occur on a level not realized by the theories discussed in this Thesis. An affective feedback loop occurs, for example, when a particular cognitive judgment or social belief that  $x$  is disgusting influences the selection for innate biological processes which dispose an individual to avoid  $x$  and this avoidance increases the reproductive fitness of the individuals that adhere to the belief that  $x$  should be avoided. As the genes and behaviors related to the avoidance of and disgust at  $x$  are passed onto posterity through social interaction and conditioning the genetic factors reinforce the particular social beliefs which first selected for them, and the affective experience is mutually influenced by both.<sup>22</sup> A specific example of this process is related to the earlier discussion of the aversion to blood and other bodily fluids. While an aversion to blood is not realized within an individual from birth, millennia of naturally selective forces have predisposed humans to be quickly conditioned to this type of aversion. Evolutionary psychologists, like Baron-Cohen, suggest that the evolutionary force of this looping effect is driven by the fact that creatures that avoid blood and other bodily fluids are less likely to be exposed to potentially deadly bacteria and other biohazardous contaminants common at scenes in which large amounts of blood and other bodily fluids are present (e.g., scenes of decomposing carcasses). Further, the social forces fulfill their role as the older generations of a society demonstrate aversions to blood and other bodily fluids and thus provide younger generations with the illustrative conditioning experiences necessary to activate their phylogenic predispositions to develop an aversion to these abject scenes.<sup>23</sup>

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<sup>22</sup> Recall, for example, Mineka's and Cook's research which showed the necessity of social conditioning being associated with an "innate" predisposition to fear snake-like objects in order for that fear to be exhibited by a given monkey (see section 3.1.2).

<sup>23</sup> The question might arise as to where the original phylogenic predisposition for the aversion to blood and other bodily fluids might have come from. The answer lies in the process of natural selection which is driven forward by the selection *for* and *against* random mutations. Where one ancient creature's genetic code may have randomly generated a predisposition to be attracted to scenes of decomposing carcasses, another creature of that species may have a genetic code randomly predisposed to avert them from such scenes. As the course of natural selection takes its toll, if one of the predispositions plays a favorable role in its species' survival and reproductive abilities, given

The attempts of both the cognitive and non-cognitive theories of emotion to understand the foundation of emotion as issuing from one particular facet of the capacities characteristic of human beings hinder the ability of each framework to create a potentially more robust understanding of affective experience. Constructing a more complete theoretical framework from each perspective is beneficial because both theories of emotion provide such a focused framework that they are forced to distort the opposite theory's account in order to accommodate the entirety of human affective experience. That is why I argue that more compatibilistic theories of emotion, such as those presented by Nussbaum and Robinson, provide the more effective framework from which to understand the affective experience of human beings more completely. The incorporation of the theory of affective feedback looping, I hold, improves a theory of emotion's ability to more completely appreciate the immense influence that both social *and* evolutionary forces have on human affective experience and each other without the necessity of reducing either force into a process embodied by its counterpart (i.e., social forces need not be explained by reducing them to evolutionary processes and vice versa). The theory of affective feedback looping is an effective way to show the shortcomings of the theories on each side of the cognitive vs. non-cognitive debate and further support compatibilist theories which work to incorporate both aspects of humans' affective experience.

## **6. Conclusion**

Human affective experience mirrors the other aspects of the human condition in that it is comprised of a multi-faceted intersection of both biological and social forces. The boundary between people's cognitive and non-cognitive processes is clouded by the ways in which those facets of the human experience can be both conscious and unconscious. However, by carefully defining what I

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its unique environmental and social pressures, that genetic predisposition will be selected for while the other predisposition will be selected against.

mean in reference to the categories of cognitivism and non-cognitivism, I present the argument that cognitive and non-cognitive theories each provide accurate, yet partial, theories to explain human affective experience. This is because the exclusivity exhibited by each framework hinders its ability to fully appreciate the aspect of affective experience emphasized by the other. That is, non-cognitivist approaches like that of evolutionary psychologists may initially seem prepared to make accommodations for some of the ways in which affective experience is influenced by social forces. However, the evolutionary psychologist's approach is hindered in its inability to explain some of nuances of affective experience that are more fully addressed by social constructionism. Conversely, the work of cognitivists like those working on social constructionist theories in the anthropological fields, are very capable of presenting theories of emotion based upon intricate examinations of the influence of social forces throughout a people's history. Yet, this camp is subject to overlooking the facets of understanding that can be developed in a theory through an examination of the natural forces that select for certain evolutionary tools and establish predispositions for particular affective experiences within a people. Therefore, each side of the cognitivist / non-cognitivist divide is prepared to develop theories which lack certain considerations that the other side is specialized in.

A move towards compatibilism offers the potential for developing theories which more robustly conceptualize human affective experience. I have argued that both Nussbaum's and Robinson's theories embody this move towards compatibilism and that the concept of affective feedback looping, provides an illustrative example of how the compatibilist's hybrid account of affective experience is superior because it more fully integrates the current data on the study of emotion from both sides of the cognitivism / non-cognitivism divide.

The concept of affective feedback looping detailed in this thesis is aimed at offering a way compatibilist theories might be strengthened by providing them with a way to test whether or not a given theory of emotion is able to account for the multifaceted way in which emotion is influenced by both evolutionary and social forces. Emotion is a dynamic aspect of humankind's affective

experience, and it is essential for any theory aiming at a comprehensive account of human affective experience to be compatible with both the cognitive and non-cognitive aspects of human emotion.

### Bibliography of Works Consulted

- Baron-Cohen, S. (1997). *The Maladapted Mind*. East Sussex, UK: Psychology Press.
- Bloom, I. (1997). Human nature and biological nature in Mencius. *Philosophy East & West*, 47(1). A Panel of the 1995 Annual Meeting of the Association for Asian Studies (Jan.): 21-32.
- Brumbach, H. J., and Jarvenpa, R. (1997). "Ethnoarchaeology of Subsistence Space and Gender: A Subarctic Dene Case." in *American Antiquity*, 62, pp. 414-36.
- Carroll, N. (1990). *The Philosophy of Horror, or, Paradoxes of The Heart*. New York: Routledge.
- Coplan, A. (2010). Feeling Without Thinking: Lessons from the Ancients on Emotion and Virtue Acquisition. *Metaphilosophy*, 41(1/2): 132-151.
- Clark, A and Chalmers, D (1998). The Extended Mind. *Analysis*, vol. 50, pp 10-23. Last accessed online Dec. 12, 2010: <http://consc.net/papers/extended.html>
- Cook, M and Mineka, S. (1990). "Selective Associations in the Observational Conditioning of Fear" in *Rhesus Monkeys Journal of Experimental Psychology: Animal Behavior Processes*. Vol. 16, No, 4, 372-389.
- Creed, B. (1993). *The Monstrous-Feminine-Film, Feminism, Psychoanalysis*. New York, NY: Routledge.
- Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. Orlando, FL: Harcourt, Inc.
- Davidson, R. J. (1992). "Emotion and affective style: Hemispheric substrates". *Psychological Science*, 3, 39-43.
- De Waal, F. (1996). *Good natured: The origins of right and wrong in humans and other animals*. Cambridge, MA: Harvard University Press.
- Deutscher, F. (2010, August 26). Does Your Language Shape How You Think?. *The New York Times*, last accessed online Oct. 12, 2010: <http://www.nytimes.com/2010/08/29/magazine/29language-t.html?pagewanted=all>
- Donlon, D. (1993). "Imbalance in the Sex Ratio in Collections of Australian Aboriginal Skeletal Remains," in H. duCros and L. Smith, eds, *Women in Archaeology: A Feminist Critique*, pp. 98-103. Canberra: Australian National University Occasional Papers.
- Dutton, D. (2009). *The art instinct: Beauty, pleasure, and human evolution*. New York, NY: Bloomsbury Press.
- Ekman, P. (2003). *Emotions revealed: Recognizing faces and feelings to improve communication and emotional life*. New York, NY: Times Books.

- Ekman, P, Friesen, W.V., and Levenson, R.W. (1990) "Voluntary Facial Action Generates Emotion-Specific Autonomic Nervous System Activity" in *Psychophysiology*, Vol. 27, No. 4 (July), pp 363-384.
- Empathy, n.  
 Second edition, 1989; online version November 2010.  
 <<http://www.oed.com.www2.lib.ku.edu:2048/Entry/61284>>; accessed 16 December 2010.  
 First published in *A Supplement to the OED* I, 1972.
- Ethnography, n.  
 Second edition, 1989; online version November 2010.  
 <<http://www.oed.com.www2.lib.ku.edu:2048/Entry/64809>>; accessed 17 December 2010.  
 Earlier version first published in *New English Dictionary*, 1891.
- Faucher, L. & Tappolet, C. (2006). Introduction: Modularity and the Nature of Emotions. *Canadian Journal of Philosophy*, 36(32): vii-xxxi.
- Fish, J.S. (2005). Talcott Parsons and the Sociology of Emotion. *Sociological Perspectives*, 48(1), (Spring): 135-152.
- Goddard, C. (1991). Anger in the western desert: A case study in the cross-cultural semantics of emotion. *Man*, 26(2): 265-279.
- Hacking, I. (1995). *Rewriting the soul: Multiple personality and the sciences of memory*. Princeton, NJ: Princeton University Press.
- Hacking, I. (1999). *The social construction of what?* Cambridge, MA: President and fellows of Harvard College.
- Harkin, M.E. (2003). Feeling and Thinking in Memory and Forgetting: Toward an Ethnohistory of the Emotions. *Ethnohistory*, 50(2): 261-284.
- Haselton, M.G., and Ketelaar, T. (2005). "Irrational Emotions or Emotional Wisdom? The Evolutionary Psychology of Emotions and Behavior" in *Hearts and minds: Affective influences on social cognition and behavior*. J. Forgas (ed.). Frontiers of Social Psychology Series. New York, NY: Psychology Press, pp 1-21.
- Hazelrigg, L.E. (1986). Is There a Choice Between "Constructionism" and "Objectiveism"? *Social Problems*, 33(6), Special Theory Issue (Oct.-Dec.): S1-S13.
- Herman, S. & Schneider, A. (2009). Critiquing Models of Emotions. *Sociological Methods & Research*, 37(4): 560-589.
- Jaggar, A.M. (1989). "Love and Knowledge: Emotion in Feminist Epistemology". *Inquiry* 32 (2):151 – 176.
- Kincaid, H., Dupré, J., and Wylie, A. (2007). *Value-Free Science?*. New York: Oxford University Press.



- Kristeva, J. (1982). *The Powers of Horror: An essay on abjection*. New York: Columbia University Press.
- Lawler, E.J. & Thye, S.R. (1999). Bringing emotions into social exchange theory. *Annual Review of Sociology*, 2: 335-362.
- LeDoux, J. (1994). "Emotion, Memory and the Brain." *Scientific American* 270: 50-57.
- Lutz, C.A. (1998). *Unnatural emotions: Everyday sentiments on a Micronesian atoll and their challenge to Western theory*. Chicago, IL: The University of Chicago Press.
- Lyon, M.L. (1995). Missing Emotion: The Limitations of Cultural Constructionism in the Study of Emotion. *Cultural Anthropology*, 10(2): 244-263.
- Murno, D.J. (2005). *A Chinese Ethics for the New Century: The Ch'ien Mu Lectures in History and Culture, and Other Essays on Science and Confucian Ethics*. Hong Kong: Chinese University Press.
- Nichols, R. (2009). A Genealogy of Early Confucian Moral Psychology. ts.
- Northoff, G., Richter, A., Gessner, M., Schlagenhauf, F., Stephan, K., Fell, J., Baumgart, F., Kaulisch, T., Kötter, R., Leschinger, A., Bargel, B., Witzel, T., Hinrichs, H., Bogerts, B., Scheich, H., & Heinze, H.-J. (2000). "Functional dissociation between medial and lateral orbitofrontal cortical spatiotemporal activation in negative and positive emotions: A combined fMRI/MEG study. *Cerebral Cortex*, 10, 93-107.
- Nussbaum, M.C. (2001). *Upheavals of thought: The intelligence of emotion*. New York, NY: Cambridge University Press.
- Nussbaum, M.C. (2004). *Hiding from humanity: Disgust, shame, and the law*. Princeton, NJ: Princeton University Press.
- Plantinga, C. & Smith, G.M. (1999). *Passionate views: Film, cognition, and emotion*. Baltimore, MD: The Johns Hopkins University Press.
- Plato. (1992). *Republic*. G.M.A. Grube (trans). Indianapolis/Cambridge: Hackett Publishing Company, Inc.
- December 2010. This word was first included in *New English Dictionary*, 1907, as a subentry of "post, prep."
- Prinz, J.J. (2007). *The emotional construction of morals*. New York, NY: Oxford University Press, Inc.
- Prinz, J.J. (2004). *Gut reactions: A perceptual theory of emotion*. New York, NY: Oxford University Press, Inc.

- Reddy, W.M. (1997). Against constructionism: The historical ethnography of emotions. *Current Anthropology*, 38(3): 327-351.
- Regan, M.C. (1993). Reason, Tradition, and Family Law: A Comment on Social Constructionism. *Virginia Law Review*, 79(7), Symposium on Sexual Orientation and the Law (Oct.): 1515-1533.
- Robinson, J. (2005). *Deeper than reason: Emotion and its role in literature, music, and art*. New York, NY: Oxford University Press, Inc.
- Robinson, J. (2007). Chapter on "Emotion" from a draft of the *Oxford Handbook*. ts.
- Schneider, A. (2002). Probing unknown cultures. *Electronic Journal of Sociology*, 6(3).
- Shimizu, H. & Levine, R.A. (2001). *Japanese frames of mind: Cultural perspectives on human development*. Cambridge, UK: Cambridge University Press.
- Simon, G.M. (2005). Shame, Knowing, and Anthropology: On Robert I. Levy and the Study of Emotion. *Ethos*, 33: 493-498.
- Solomon, R.C. (2004). *Thinking about feeling: Contemporary philosophers on emotions*. New York, NY: Oxford University Press, Inc.
- Stob, P. (2008). "Terministic Screens," Social Constructionism, and the Language of Experience: Kenneth Burke's Utilization of William James. *Philosophy and Rhetoric*, 41(2): 130-152.
- Sutton, S. K., & Davidson, R. J. (1997). "Prefrontal brain asymmetry: A biological substrate of the behavioral approach and inhibition systems". *Psychological Science*, 8, 204-10.
- Sympathy, n.  
 Second edition, 1989; online version November 2010.  
 <<http://www.oed.com.www2.lib.ku.edu:2048/Entry/196271>>; accessed 16 December 2010.  
 Earlier version first published in *New English Dictionary*, 1919.
- Weinert, Friedel. (2009). *Copernicus, Darwin, & Freud: Revolutions in the History and Philosophy of Science*. Malden, MA: Wiley-Blackwell.